

**WE CLAIM:**

1. A method of diagnosing precancerous or cancerous conditions in a mammal,  
5 comprising obtaining a biological sample from a gastrointestinal site of said mammal  
and placing the sample into an enzymatic or immunologic assay to detect the presence  
of a backleak of at least one signature protein in the gastrointestinal tract.
2. The method of **Claim 1**, wherein said signature protein is at least one of  
10 trefoil factor, pepsin, and salivary amylase.
3. A method of diagnosing precancerous or cancerous conditions in a mammal,  
comprising obtaining a biological sample from a gastrointestinal site of said mammal  
and placing the sample into an enzymatic or immunologic assay to detect the presence  
15 of a backleak of at least one signature carbohydrate in the gastrointestinal tract.
4. The method of **Claim 3**, wherein said signature carbohydrate is at least one of  
the group of mannitol and sucrose.

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